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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/813,929	03/21/2001	Tzvi Avnery	2251.2007-000	1834

21005 7590 08/26/2002

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EXAMINER

MCCAMEY, ANN M

ART UNIT	PAPER NUMBER
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2833

DATE MAILED: 08/26/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/813,929

Applicant(s)

AVNERY, TZVI

Examiner

Ann M McCamey

Art Unit

2833

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5, 6, 8. 6) ☐ Other: _____

DETAILED ACTION

Specification

The disclosure is objected to because of the following informalities: the incorporation by reference of patented U.S. applications should be replaced with their respective patent numbers.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 12, 21 and 32 are rejected under 35 U.S.C. 102(b) as being anticipated by Avnery (US 4,591,756).

Regarding claim 1, Avnery discloses an exit window 5 comprising:
an exit window foil having an interior and exterior surface; and
a corrosion resistant layer having high thermal conductivity formed over the exterior surface of the exit window foil.

Regarding claim 12, Avnery discloses an electron beam emitter comprising:
a vacuum chamber;
an electron generator position within the vacuum chamber; and

an exit window on the vacuum chamber through which the electrons exit the vacuum chamber in an electron beam, the exit window comprising an exit window foil comprising an interior and exterior surface, and a corrosion resistant layer having high thermal conductivity formed over the exterior surface of the exit window foil.

Regarding claims 21 and 32, the method of forming is inherent to the device.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-5, 7-11, 13-16, 18-20, 22-25, 27-30, 33-36 and 38-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Avernoy, as applied to the claims above.

Regarding claims 2-5, 7, 9-11, 13-16, 18 and 20, Avernoy discloses the invention substantially as claimed, but does not disclose specific thickness and properties of the various layers. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the particular thickness and properties of the layers as claimed, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Regarding claims 8 and 19, Avernoy discloses the invention substantially as claimed, but does not disclose the corrosion resistant layer being formed by vapor deposition. Vapor deposition is a well-known technique in the art for thin-film coating. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use vapor deposition to enable films to be applied to materials thinly and evenly.

Regarding claims 22-25, 27-29, 30, 33-36, and 38-40, the method of forming is inherent to the device.

Claims 6, 11, 17, 26, 31 and 37, are rejected under 35 U.S.C. 103(a) as being unpatentable over Avernoy in view of Jacob et al. (US 5,235,239).

Regarding claims 6 and 17, Avernoy discloses the invention substantially as claimed, but does not disclose diamond as the corrosion resistant layer. Jacob et al. teach diamond as a suitable material for exit foils. It would have been obvious to one having ordinary skill in the art at the time the invention was made to choose diamond as the corrosion layer, since it has been held to be within the general skill of a worker in to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Lescin*, 125 USPQ 416.


Regarding claims 26, 31 and 37, the method of forming is inherent to the device.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ann M McCamey whose telephone number is (703) 305-3422. The examiner can normally be reached on M-F 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on (703) 308-2319. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.


Gary Paumen
Primary Examiner

AMM
August 15, 2002